

Policy Reform in Egypt's Water and Wastewater Sector: Decentralization and Private Sector Participation

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FORWARD

Collaborative Approaches for Resolving Water Issues



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EXECUTIVE SUMMARY

The Government of Egypt (GOE) has indicated, at the most senior level, its intention to support decentralization and private sector participation in the water and wastewater sector. The government has designated the Ministry of Housing, Public Utilities and New Communities (MPHU) as the lead agency in the development of a comprehensive sector reform agenda and strategy that would lead to an improved legal, institutional, regulatory, and policy environment for these critical policy initiatives.

In late 1997, USAID/Cairo offered to support the GOE and MPHU's efforts through the assistance of the FORWARD Project. FORWARD is a USAID regional project that brings collaborative planning and problem-solving approaches to the policy arena, enabling decision-makers to reach agreement on longstanding issues that have impeded progress and delayed implementation.

Approach and Program Components

FORWARD is providing collaborative planning, decision-making, and facilitation expertise to support national- and governorate-level stakeholders in Egypt's water and wastewater sector to:

- Design a reform agenda and strategy to support private sector participation and decentralization;
- Agree on how to implement the policy reforms; and
- Elaborate approaches to work together effectively.

FORWARD's program has five components:

- Facilitation of a decision-making process for a water and wastewater policy reform agenda and strategy;
- Facilitation of agenda setting and problem resolution by the chairmen of the Public Economic Authorities;
- Mediation of utility disputes and development of dispute resolution mechanisms;
- Assessment of the managerial capacity of Cairo General Organization for Sanitary Drainage to operate and manage the Greater Cairo wastewater systems; and
- Collaborative problem-solving training.

At USAID's request, FORWARD is coordinating its work on the first component with the USAID-funded Legal, Institutional, and Regulatory Reform Program (LIR), being implemented by Chemonics-Egypt and the Institute for Public-Private Partnership.

Situational Analysis

Work on the component focusing on policy reform agenda and strategy began with a situational analysis to identify:

- Key stakeholders at the national, governorate and local levels who should be involved in the policy reform dialogue;
- Critical issues facing the water and wastewater sector; and
- Stakeholder recommendations for an appropriate process that could be used to build agreement on the reform agenda.

A FORWARD team gathered data for the situational analysis in Egypt between May and August 1998. At the same time, the Ministerial Cabinet of the Government of Egypt moved ahead on major reforms of the potable water and wastewater sector. At the Cabinet's request, MPHU formed a steering committee to develop specific reform proposals to be submitted to the Cabinet. The head of the National Organization for Potable Water and Sanitary Drainage (NOPWASD) was named the committee chair. The FORWARD team focused its efforts on defining a collaborative planning approach that could be used by the committee to move ahead swiftly on sector reform.

Identification of Key Stakeholders

The FORWARD team identified the following groups as key stakeholders to be included in some way in the policy reform process:

- Prime Minister
- Cabinet
- Peoples' Assembly
- Ministries and central agencies with mandates related to water and wastewater
- NOPWASD
- Governors and governorate staff
- Utilities
- Local councils
- Consumers or customers

These stakeholders have very different roles in policy reform, but they cannot be involved in the same way in preparation of the sector reform strategy. However, all of them should be considered as interested parties and be given an opportunity to participate in the process and contribute to the end result. Without involvement of these key stakeholders

in the development of private sector participation and decentralization reforms, effective implementation and sustainability will be much more difficult to achieve.

The FORWARD team interviewed over 40 stakeholders from these groups to identify specific issues that need to be addressed during the policy reform process.

Substantive Technical Issues

During the data gathering stage, stakeholders identified a number of technical issues to be considered during the development of a policy reform strategy leading to PRIVATE SECTOR PARTICIPATION and decentralization. The issues can be categorized under five major categories.

- Institutional issues
- Legal and regulatory issues
- Financing, private sector participation, cost recovery and tariffs
- Utility management and operations
- Technical problems

An analysis of the data is included in this report.

Stakeholder Proposals for Involvement in the Policy Reform Process

Stakeholders were also asked to identify possible processes that would be appropriate for facilitating participation of all relevant parties during the development of the reform agenda and strategy. They recommended that all principal parties be included in developing solutions that will meet their interests and which they can then support fully and implement effectively. Most interviewees agreed that a collaborative planning approach is desirable, should be tried, and would perhaps be the only way to bring together all stakeholders' views in the sector and arrive at a comprehensive policy reform package. Stakeholders also recommended that once new policies have been established to support private sector participation and decentralization, a stakeholder oversight group should be created to coordinate implementation of the policies.

Recommendations

The following are proposed activities for FORWARD as part of the water and wastewater policy reform process:

Steering Committee

Work closely with the steering committee that has already been formed to support their efforts to design a policy reform agenda. Provide support in the design and facilitation of this effort.

Working Groups

With the approval of the steering committee and in coordination with LIR, establish three or four working groups that would focus on specific issues related to policy reform. The output of the working groups would serve as inputs into the policy reform proposals being prepared by the steering committee for submission to the Cabinet.

Training and Educational Efforts

Provide executive briefings and training in facilitation, interest-based negotiation, and collaborative problem-solving to members of the steering committee, working groups, and others. Work closely with LIR on the identification, design and implementation of various technical training sessions for the steering committee and working groups.

National and Local Sector Workshops

Organize and facilitate national and local sector workshops to discuss and agree on how to implement the sector strategy, following Cabinet approval of the reform process.

Utility Staff Meetings

Convene and facilitate meetings at the governorate-level with utility staff to discuss local issues and incorporate those into institutional reform strategies.

Technical support to the GOE

Provide technical support to the GOE beyond the LIR mandate in areas to be identified, such as tariff reforms and water resources management.

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ACRONYMS

AGOSD	Alexandria General Organization for Sanitary Drainage
ANE	Asia and Near East Bureau
AWGA	Alexandria Water General Authority
CAOA	Central Agency for Organization Administration
CGOSD	Cairo General Organization for Sanitary Drainage
FORWARD	Fostering Resolution of Water Resources Disputes
GOE	Government of Egypt
GOG/GOGCWS	General Organization for Greater Cairo Water Supply
LIR	Legal, Institutional, and Regulatory Reform Program
MHPU	Ministry of Housing, Public Utilities and New Communities
NGO	Non-governmental Organization
NOPWASD	National Organization for Potable Water and Sanitary Drainage
PEA	Public Economic Authority
USAID	United States Agency for International Development

CHAPTER 1

INTRODUCTION

Framing the Issue

The Government of Egypt is currently designing policy reforms in the water and wastewater sector to support decentralization and encourage private sector participation. It has already broadly articulated some of the policy reforms in the water and wastewater sector through presidential decrees and laws. As is often the case, even if the policies are clearly stated, the long-term vision and a comprehensive implementation strategy are not defined. National institutions, governorate authorities, and water and wastewater agencies are left to tackle how they will proceed and are usually blocked in the process. Relations between national authorities and governorates flounder because there is no agreed-upon implementation plan. This can lead to increased frustration and misunderstandings on all sides. In the end, the policy reforms may not be implemented at all.

The Government of Egypt has already broadly articulated some of the policy reforms in the water and wastewater sector through presidential decrees and laws, but the long-term vision and a comprehensive implementation strategy are not defined.

A good example is Presidential Decree No. 281 of 1995 which established public economic authorities (PEAs) in seven governorates but failed to disclose how they were to reach autonomy and what the role and responsibilities of national and governorate agencies would be in the future. As a result, autonomy remains an illusive goal. Utilities are expected to become financially self-sufficient but do not have the authority to do so. Similarly, the GOE would like to involve the private sector in the wastewater sector to increase efficiency and attract investment as it has in electricity and transportation. A favorable environment needs to be created before there is significant private sector participation, but what that environment is and how it will be brought about in the water and wastewater sector are still undetermined.

Current Situation

The ability of the water and wastewater sector in Egypt to respond to unprecedented demands for services, particularly in the urban areas, has been hampered by a number of issues, including:

- Legal and regulatory structures that inhibit coordination and efficient operations between agencies and parties;

A favorable environment needs to be created before there is significant private sector participation, but what that environment is and and it will be brought about in the water and wastewater sector are still undetermined.

- Current financial arrangements;
- Technical problems; and
- National values and community norms about access to water.

Institutional, Legal and Regulatory Issues

The large number of institutional structures and diverse legal and regulatory arrangements are a considerable deterrent to coordination within the sector. A recent report¹ by the National Organization for Potable Water and Sanitary Drainage (NOPWASD) identified more than 30 central and local agencies that participate in the water and wastewater sector.

Many ministries and other entities have mandates related to water and wastewater, but none has responsibility for coordinating the activities of the sector. They actively compete with one another for control, or make unilateral decisions that have adverse impacts on the interests of other parties, including the public.

Some of the many ministries and entities that have mandates related to water and wastewater include:

- Ministry of Housing, Public Utilities and New Communities
- National Organization for Potable Water and Sanitary Drainage
- Ministry of Finance
- National Investment Bank
- Ministry of Planning and International Cooperation
- Ministry of Public Works and Water Resource
- Ministry of Rural Development
- Ministry of Local Government

Many ministries and entities have mandates related to water and wastewater, but none has responsibility for coordinating the activities of the sector.

These entities actively compete with one another for control or make unilateral decisions that have adverse impacts on the interests of other parties, as well as on the general public.

In addition to these national level agencies, a significant number of local level entities are also involved in the sector. Some of the key players include:

- Governors
- Local councils

¹ *Rehabilitation, Operation, and Management for the Nationwide Potable Water and Wastewater Sector*, Ministry of Housing, Public Utilities, and New Communities, 1998, hereafter cited as the NOPWASD report.

- General Organization for Greater Cairo Water Supply
- Cairo General Organization for Sanitary Drainage
- Alexandria Water General Authority
- Alexandria General Organization for Sanitary Drainage
- Suez Canal Authority; Housing and Utility Directorates in the governorate-level local administration
- Potable water and wastewater shareholder companies in Beheira, Kafr El Sheikh, and Damietta
- Seven independent public economic authorities in Aswan, Minia, Beni Suef, Fayoum, Daqahlia, Sharqiya, and Gharbiya
- Private sector companies that provide potable water
- Urban Communities Authority
- Central Agency for New Communities

The number and diversity of central, regional, and local agencies involved in setting policy, planning, financing, operating, and maintaining the sector has lead to significant coordination problems and gridlock in the policy making process.

Current Financial Arrangements

The sector has also encountered significant financial difficulties. Historically the sector has been financed extensively by GOE revenues, with significant additional assistance from a number of international donors. Current demands for operations and maintenance, rehabilitation, and new investment are outpacing the capacity of the government and donors to support the sector and meet citizen needs.

Adequate government subsidies are no longer available, and alternative funding mechanisms need to be explored and developed.

Some of the alternative financial arrangements that have been or are currently being explored include raising tariffs so that they reflect actual costs of providing water and wastewater services, introducing more competition into the sector to improve efficiencies, and exploring various levels of private sector investment.

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Technical Concerns

There are also a number of technical concerns that have posed significant difficulties within the sector. While new production plants and networks for potable water and wastewater facilities have been built, older networks have deteriorated. Environmental impacts over time, quality of equipment, levels of maintenance, limited management

staff expertise, and constraints on funding have all resulted in severe strains on the current system.

One of the most serious technical problems is unaccounted-for water. In its report, NOPWASD stated that the annual amount of potable water available in Egypt is almost 5.9 billion cubic meters, and the average amount lost from the network is close to 2.95 billion cubic meters, or 50%. Technical losses in networks (defective or leaky pipes, incorrect operation of water pumps, poorly designed connections, improper installations, and inadequate connections between the network and buildings or within buildings themselves) account for approximately half of these losses. An additional 30% of water loss is caused by non-technical problems such as broken meters, illegal connections to homes and small factories, unmetered public taps in urban areas and villages, including public toilets, houses of worship, and street taps.

National Values and Community Norms Concerning Access to Water

Community norms and expectations concerning water and wastewater services have also seriously affected the sector's ability to respond to increasing needs. The GOE guarantees the provision of water to citizens as a right, and has provided services at no or low cost to consumers. The public – both low-income consumers and large water users, such as state agencies and private sector entities – see the provision of water and wastewater services as an entitlement. This policy was developed both as part of the state's ideology and operating principles in the 1950's, and as a strong commitment by the government to respond to and meet the basic needs of low-income citizens. For this reason, water and wastewater tariffs have been kept low so that they are affordable by the poor. These tariffs have not reflected actual costs of service and the sector has required large subsidies from general government coffers. Another factor that impacts the sector's ability to provide adequate services is the non-payment of bills, especially by large public and private sector organizations.

The GOE guarantees the provision of water to citizens as a right, and has provided services at no or low cost to consumers. The public – both low-income consumers and large water users, such as state agencies and private sector entities – see the provision of water and wastewater services as an entitlement.

Users do not expect to be charged, at least not heavily, for basic services. Low water tariffs that address the needs of the poor also subsidize those users who can afford to pay, thus depressing a potential revenue stream which could be used to support and expand the provision of services in the sector. Many believe that in order for the government to better meet the water needs of all current and future citizens, the commitment to provide water to the poor at an affordable price needs to be de-linked from the setting of realistic prices for services.

Participating Institutions

The Government of Egypt has moved with great speed in recent months to begin a comprehensive reform process within the water and wastewater sector. NOPWASD, an organization within the Ministry of Housing, Public Utilities and New Communities has taken the lead in these reform efforts. NOPWASD is responsible for policy development, planning, design and implementation of projects in rural and urban areas, and supervision of design and building of water and wastewater infrastructure projects that are then turned over to local authorities to manage.

The chairman of NOPWASD was responsible for the development of the report, *Rehabilitation, Operation, and Management for the Nationwide Potable Water and Wastewater Sector*, that was submitted to the Cabinet in June 1998. The report identified major constraints and proposed major reform measures within the sector and reinvigorated the discussion within the government about sector reform.

Based on the Cabinet's reactions to the report, the NOPWASD chairman was directed by the Minister of Housing, Public Utilities, and New Communities to take the lead in preparing a second report that would include a vision of sector reform and supporting draft legislation to be submitted to the Cabinet. The chairman of NOPWASD formed a steering committee, composed of representatives from various national, local and regional stakeholders, to support the development of the report and draft legislation. Following the submission of draft legislation, the steering committee is to continue work on developing the details of sector reform.

At the same time that NOPWASD was preparing the initial sector study, USAID requested the FORWARD project to support the GOE's ongoing decentralization and private sector participation efforts in the sector. USAID also requested that the Legal, Institutional, and Regulatory Reform Program (LIR) support the development of a sector reform model with NOPWASD. Both FORWARD and LIR are working in a partnership under the auspices of USAID to support the reform efforts of NOPWASD and the MHPU.

Overview of FORWARD

FORWARD is a regional project of USAID's Asia and Near East Bureau that brings collaborative planning and problem-solving to the policy arena, enabling decision-makers to reach agreement on longstanding, critical issues that have blocked progress and hindered implementation of programs.

FORWARD brings parties with different interests together to reach sustainable agreements. The collaborative approach empowers stakeholders to take ownership of the process and strengthens the capacity of local institutions and professionals to address water issues whenever they arise.

The major objectives of FORWARD are to:

- Reach agreement on important water issues by integrating collaborative problem-solving, approaches with technical water expertise;
- Develop and strengthen capacity in the Middle East for collaborative problem-solving through training of stakeholders and mediators; and
- Develop socially, politically, and culturally appropriate dispute resolution approaches in the Middle East which use the best practices of U.S. alternative dispute resolution and local conflict management.

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Collaborative Planning Approach

The collaborative planning approach can be defined as a voluntary problem-solving approach that involves stakeholders who have a direct stake in the outcome of a particular issue. Use of collaborative planning can help stakeholders identify and better understand the interests that underlie each party's position. The approach facilitates the identification of mutually acceptable options to deal with issues, formulates objective criteria to evaluate the options, and helps develop plans for implementation.

Elements of FORWARD's collaborative planning approach includes:

- Comprehensive assessment of the needs and expectations of the key parties;
- Ownership of the process by stakeholders;
- Agreement on a vision as well as a detailed workplan, identification of roles and expected outcomes;
- Agreement on barriers or roadblocks;
- Joint design of collaborative processes to overcome obstacles and resolve differences;
- Collaborative problem-solving and negotiation training to empower participants;
- Identification of interim agreements throughout the collaborative process;

- Continual review of expectations and outcomes;
- Involvement of major stakeholders at different levels of authority; and
- Participation of impartial facilitators and collaborative planning experts in the process

FORWARD's Program in Egypt

FORWARD's Egypt program includes five components:

- Facilitation of a decision-making process for a water and wastewater policy reform agenda and strategy;
- Facilitation of agenda setting and problem resolution by the chairmen of the Public Economic Authorities;
- Mediation of utility disputes and development of dispute resolution mechanisms;
- Assessment of the capacity of Cairo General Organization for Sanitary Drainage to operate and manage the Greater Cairo wastewater systems; and
- Collaborative problem-solving training.

Policy Reform Decision-Making Component

The objectives of this component are to:

- Bring the major stakeholders in the water and wastewater sector in Egypt together in an ongoing, productive dialogue to frame a water and wastewater policy reform agenda so that they see themselves as the owners of the process;
- Reach agreement among the major stakeholders on the components of the policy reform agenda;
- Integrate the technical efforts of Egypt legal/regulatory assessment and training on public-private partnerships with the decision-making process; and
- Based on the vision that emerges from the process, develop an agreed-upon action plan for the preparation of the water and wastewater strategy.

The first step in implementing the component was to conduct a situational analysis that would help guide the facilitation of a decision-making process for the policy reform agenda and strategy. The following section describes the findings of the situational analysis.

CHAPTER 2

SITUATIONAL ANALYSIS

Overview

A situational analysis generally provides the most critical information needed to make a decision on whether and how to convene a group to deliberate and come to agreement on mutually acceptable solutions to common problems.

Approach

The FORWARD team used four steps to collect data for the situational analysis:

- It reviewed relevant documents, including memoranda, government reports, newspaper articles, and past studies;
- It conducted extensive interviews of actual or potential individual stakeholders or parties;
- It attended and observed meetings involving concerned parties; and
- It administered questionnaires and analyzed responses.

Elements of a Situational Analysis

- Identify key parties or stakeholders who should or must be involved in the process for it to be successful
- Identify and frame major issues for discussion or negotiation, and the key interests of potential stakeholders
- Explore potential approaches, forums, and procedures that might be appropriate and successful for dialogue and reaching agreement
- Discuss draft recommendations with the sponsoring agency or agencies
- Draft a preliminary action plan, timetable, agenda for first meetings, and proposed facilitation process
- Prepare a “Convening Report” including recommendations to the sponsoring agency or agencies on how to proceed

Beginning in May, 1998, the team reviewed a number of reports provided by GOE agencies, donors, and consultants familiar with sector issues. This review provided basic background information to conduct a series of interviews with potential stakeholders.

The interview strategy was to identify a representational cross-section of key parties and potential individual stakeholders from the following groups:

- Ministries and other central agencies

- Governors and governorate staff
- Utilities
- Local councils
- Other groups

Between May and August 1998, more than 40 in-depth interviews were conducted with individual stakeholders representing the various groups. The outcomes of the interviews included various perspectives on sector issues, perceived opportunities for resolution, reasons for resolving the issues, and procedural suggestions and recommendations.

The team also participated in meetings of the MPHU steering committee to gather additional data. Two meetings were held in July in Alexandria and in August in Cairo. These sessions allowed the team to discuss issues with multiple stakeholders in small groups and to provide some insights to the steering committee on potential issues that need to be discussed during the reform process. The meetings also enabled the team to observe some of the group dynamics and interactions of key stakeholders.

The final method of data collection was a written survey of opinions of the members of the steering committee, some of whom had also been interviewed by the FORWARD team. The survey was authorized by the steering committee at the conclusion of the August meeting. A written report containing the results of the survey was prepared and provided to the steering committee by the end of September 1998.

To complete the situational analysis, information gained through various data collection procedures was compiled and analyzed to identify key parties, broad sector themes, issues, interests and possible procedures to use to build collaboration. The following chapter contains a description of the major stakeholders in the reform process.

CHAPTER THREE

STAKEHOLDER ANALYSIS

The interviews conducted during the situational analysis identified nine key stakeholder groups or parties that were essential groups to consult with or directly involve in sector reform. (Appendix A contains a complete list of stakeholders interviewed.) These parties have very different roles in decision-making. Not all need to be involved in the same way in preparation of the sector reform strategy. All of them, however, ought to be considered as interested parties and given a meaningful role in contributing to the end result.

The FORWARD team identified the following stakeholder groups who should be involved in the policy reform process:

- Prime Minister
- Cabinet
- Peoples' Assembly
- Ministries and central agencies with mandates related to water and wastewater
- NOPWASD
- Governors and governorate staff
- Utilities
- Local councils
- Consumers or customers

The following is a description of the key stakeholders and an explanation of why they might be included in any decision-making process related to reform of the water and wastewater sector.

The Prime Minister

As the second most powerful official in the government, the prime minister is a key decision-maker in the acceptance of any proposal for sector reform. He must be consulted and involved in development of any new policies. Failure to accurately appraise his interests, and those of the individuals, groups, and constituents to whom he is accountable, can result in initiatives that either fail or are later reversed.

The Cabinet

This body is composed of representatives of various ministries. One of its major tasks is the reconciliation of diverse interests and the development of coherent national policies to recommend either to the People's Assembly for legislative action, or to the president to issue a decree. As a result of different, and at times competing, interests in the

Cabinet, and lack of familiarity on the part of some members with water and wastewater issues, the body often finds it difficult to make an integrated and consensual decision. In the past, it may have been easier for the Cabinet to develop solutions to specific problems, rather than to develop a broad integrated policy reform package.

In June, 1998, the Cabinet asked the MHPU, and subsequently NOPWASD, to establish a steering committee composed of representative stakeholders from across the sector to develop a set of recommendations for comprehensive sector policy reform.

It will be easier for the Cabinet to respond positively, approve, and ultimately implement a recommendation from the steering committee if:

- Key interests of directly concerned Cabinet members have been taken into account and addressed in the proposal;
- A representative group of stakeholders from the sector has been consulted, involved in the decision-making process, and see that their interests are reflected in the recommendations; and
- The recommendation from the steering committee is a consensus decision, the strongest form of agreement that can be forwarded to a decision-making body.

The first undersecretary of the Ministry of Cabinet Affairs should also be consulted since he is the gatekeeper for issues that are addressed by the Cabinet.

Peoples' Assembly

As the legislative branch of the national government, the Peoples' Assembly has the authority to pass either comprehensive sector reform legislation, or individual laws or acts that regulate component parts of the sector. The Peoples' Assembly is more likely to pass legislation that has strong support of all concerned ministries and stakeholders and has had the benefit of comment by interested members and staff of its Utilities Committee. The Utilities Committee has been deeply involved in studying water and wastewater reform, and could be helpful in the drafting and the implementation phases of sector reform.

Central Government Ministries and Organizations

As noted earlier, a significant number of national-level agencies should be involved in sector policy making. The key ones appear to be MHPU, NOPWASD, Ministry of Finance, Ministry of Planning and International Cooperation, Ministry of Local Administration, Ministry of Public Works and Water Resources, Ministry of Health and Population, Central Agency for Organization Administration, and Ministry of State for Environmental Affairs.

All of them should be directly involved in any policy-making effort. Others that should be consulted include the Ministry of Agriculture and Land Reclamation, Ministry of Rural Development, and Ministry of Military Production.

The National Organization for Potable Water and Sanitary Drainage

NOPWASD is the central player in the process of developing water and wastewater sector reform. This organization is part of the MHPU and handles initiatives in the sector related to the development of policies and planning. It also designs and implements projects in rural and urban areas in all governorates with the exception of Cairo, Alexandria, Sinai, and the Red Sea. NOPWASD supervises the design and building of water and wastewater infrastructure projects in a number of governorates that are then turned over to local councils to manage.

NOPWASD is the central player in the process of developing water and wastewater sector reform. It is part of the MHPU and handles initiatives in the sector related to the development of policies and planning.

Governors and Governorates

Governors are appointed by the President and are the administrators of regional jurisdictions in Egypt. In this capacity, they generally appoint, work with, and supervise utility chairs for cities and towns in the governorate and play an important role in local utility management. The exception is if an alternative utility governance arrangement is in place. Governors are commonly generalists, and may not have a strong interest or expertise in the water and wastewater sector issues. However, several have been significant leaders in the creation of the seven public economic authorities. Governors must be represented and involved in the development of sector policy since they will be influential in helping utilities implement the reforms efficiently.

Utilities

Egypt has many types or categories of utilities in the sector, each with diverse financial, reporting, and management arrangements. Representatives of each of the various types of service providers should be at the table to ensure that sector-wide policies are developed that will meet the needs of the diverse utility structures.

It is recommended that representatives from the following utilities be included in the reform process:

- Large urban utilities - General Organization for Greater Cairo Water Supply, Cairo General Organization for Sanitary Drainage, Alexandria Water General Authority, Alexandria General Organization for Sanitary Drainage;
- The Suez Canal Authority, which operates facilities in Port Said, Suez, and Ismailya;
- Potable water and wastewater companies in Beheira, Kafr El Sheikh, and Damietta;
- Public economic authorities in Aswan, Minya, Beni Suef, Fayoum, Daqahliya, Sharqiya, and Gharbiya;
- Private sector companies that provide potable water or desalinate seawater;
- Utilities department of the New Communities Authority; and
- Housing and utilities directorates in the governorates.

Local Councils

These bodies are composed of elected representatives and have general oversight responsibility for the management and operation of local utilities. The elected representatives take their function seriously as representatives of consumers in their districts and therefore should be involved in any policy reform initiative.

Consumers/Customers

In the long run, it will be necessary to have an informed and educated public to implement any new sector policies effectively. This is especially true if tariffs are to be adjusted to reflect real costs.

While internal changes in the overall structure of the sector, or the management of any one utility, may be beyond the expertise or interest of the average consumer, specific consumer groups may be deeply concerned about how these changes will affect the quality of service and potential rates. Consequently, some form of representation from this broad stakeholder group should be considered in the early stages of the policy reform process.

There are two possible ways to obtain consumer input:

- They could be represented in policy deliberations by their elected representatives on local councils; or

- Representatives from one or more of the new non-governmental organizations (NGOs) that have recently been organized to represent citizen interests in water issues could participate in policy deliberations.

A decision on who might best represent the consumer could be an early decision of the steering committee or working groups.

As new policies are developed, it will also be necessary to initiate a public awareness campaign to educate consumers about proposed changes, explain potential impacts of the changes, allay concerns that new approaches will adversely impact the most needy in the society, and detail how services will be provided to low income customers.

CHAPTER 4

TECHNICAL ISSUES IDENTIFIED BY STAKEHOLDERS

This chapter presents the substantive issues, concerns, and interests that stakeholders identified during the situational analysis. The technical issues identified by stakeholders are divided into the following five categories.

- Institutional issues
- Legal and regulatory issues
- Financing, private sector participation, cost recovery and tariffs
- Utility management and operations
- Technical problems

Institutional Issues

Stakeholder Agreement

- Functions, responsibilities, and relationships between central and local sector entities are not clear, nor are they widely understood or mutually accepted. A new institutional and legal framework that defines inter-agency functions, responsibilities, overlapping authorities, and conflicting mandates is needed.
- The sector is highly fragmented administratively, and there is no single advocate or champion at the national level for the sector as a whole. A central coordinating entity is needed. It would be acceptable to most stakeholders if this central coordinating entity were located in the MHPU. If established, specific functions and areas of authority of the national coordinating entity for the sector need to be developed and agreed-upon.
- While there is strong support for a central coordinating entity among both national and local authorities, there are differences of opinion regarding its functions and areas of authority. Local entities want the central entity to perform technical support services and exert little authority over operations, a number of central agencies want the central coordinating entity to have more control over many activities of local entities. These differences must be discussed and agreement reached.
- The sector should make it a priority to move local entities to a position of financial self-sufficiency as rapidly and to the greatest extent possible. It will be necessary to clearly define the steps needed to assist local utilities to move toward financial self-sufficiency.
- Functions, responsibilities, and decision-making authority of local entities are not clear and need to be clearly defined and agreed-upon.

- Only limited forums, structures, or procedures currently exist for regular communications, discussions, and problem-solving between central government agencies and local entities, or between local entities themselves. More formal forums, structures, and channels need to be defined.
- Management structures also need to be defined that will ensure coordination between water services and wastewater services at the local level.

Stakeholder Interest for Resolving These Issues

- To clearly define functions, authorities and responsibilities for all levels of the sector.
- To provide for centralization of some appropriate functions that will help the entire sector function in a more coordinated manner, while at the same time allowing local entities sufficient autonomy to respond to local needs and conditions.
- To promote greater economic autonomy at the local level.

Legal and Regulatory Issues

Significant overlap exists between this category and that of institutional functions. Stakeholders generally identified the following issues as institutional rather than regulatory issues, but it may be important to separate legal and regulatory functions from institutional functions in order to develop appropriate responses.

Stakeholder Ageement

- Legal and regulatory frameworks are needed that define the rules and lines of authorities between ministries, line agencies, approving bodies, and local entities in order to improve delivery of services, coordination, communications and decision-making.
- A new legal/regulatory framework at the national level is needed to define the following:
 - Functions and structures of central entities;
 - Financing of the operating and capital costs of the sector;
 - Role and preferred degree of competition or privatization to be institutionalized in the sector;
 - Legislative requirements to clarify the function, structure, and degree of autonomy of local entities; and
 - The degree and rate at which fiscal authority is to be devolved from the national to the local level.

- A new legal/regulatory framework at the local level is necessary to define the following:
 - Levels of control over personnel;
 - Flexibility in procurement of goods and services; and
 - Authority to influence levels of tariffs to cover costs.
- A decision and a new legal/regulatory framework is required to clarify whether operations, financial, and regulatory functions should be combined in the same entity or separated.
- A new legal/regulatory framework to clarify performance and quality standards and appropriate monitoring mechanisms is needed.

Stakeholder Interest for Resolving These Issues

- To clearly define a legal framework that will help central entities coordinate and provide technical assistance functions and local entities better serve their customers.
- To clearly define a legal framework that will enable local entities, to the greatest extent possible, to finance their operations through tariffs.
- To clearly define a legal framework that will allow competition to be considered as one approach to achieving high performance and efficiency in the sector.
- To clearly define common national performance standards.
- To establish a staggered timeframe that devolves additional authority and functions to local entities over time, thereby avoiding abrupt changes and instability in the sector.

Financing, Private Sector Participation, Cost Recovery and Tariffs

All stakeholders regarded this category as a very high priority. The interviews identified substantial agreement on problems and possible solutions.

Stakeholder Agreement

- Central government investment allocations are insufficient to meet sector needs.
- Methods used by the central government to determine and distribute financial allocations do not support efficient utility operations, because the allocations are done at a time and in a manner inconsistent with local needs and constraints.

- Consistent delays from the central government in dispersing funds to local utilities create serious cash flow difficulties, especially for those utilities that are supposed to be independent economic units.
- There is no connection between existing tariff levels and the actual costs that utilities incur in securing, producing and distributing water and treating wastewater.
- Citizens believe water bills are calculated randomly and unfairly and therefore are unwilling to accept reasons given for increases in the existing tariff levels.
- Investment allocations provide for little or no maintenance of the facilities they are financing, only reinforcing the impression that the sector places a low priority on maintenance.
- Utilities are not allowed to use non-operational revenue, including interest from bank accounts and sales of other items, to increase resources available to support their own operations and maintenance. This lowers the incentive to maximize these outside sources of revenue.

Proposed Solutions with Substantial but Not Total Agreement

- Private sector participation in financing should be encouraged, to increase the amount of investment funding available. Private sector participation in management contracts should also be allowed.
- Tariffs should be set and adjusted in direct relation to actual costs of producing and distributing water and treating wastewater. This will help utilities calculate the proper tariff level and build customer confidence that the requested tariff is justified.
- Separate programs are needed to protect the provision of water and wastewater services to low income customers while not subsidizing water users who can afford to pay their share.
- Utilities need to concentrate on improving revenue collection systems, especially for large customers and government agencies.

Unresolved Issues Requiring More Discussion

- How to achieve the proper balance between central government budget allocations and locally generated revenue.
- How to encourage private sector participation.
- How tariffs can be adjusted to reflect actual costs, while at the same time addressing the needs of low-income customers.

- How to provide accurate cost accounting systems for local utilities, and how the utilities will finance these steps.
- The types of forums, structures and procedures that are needed to improve coordination between local utilities and those central government agencies responsible for monitoring, supervising, supplying or benefiting from those utilities.

Stakeholder Interest for Resolving These Issues

- To achieve a stable revenue base that meets the long-term operations and maintenance needs of the utility.
- To establish a proper balance between public and private investment to provide new facilities to keep pace with increasing demand from a growing population.
- To develop good working relationships with central ministries that are important for issues related to financing, cost accounting, cost recovery, and tariff policy.
- To guarantee that the water needs of low income customers will be met.
- To develop norms that support payment of services.

Utility Management and Operations

Important obstacles to managing and operating the water sector exist at the local level. Stakeholders agreed that any effort at sector reform must address utility management, operations and maintenance issues. The analysis of interviews found broad agreement on the problems and some general solutions.

Stakeholder Agreement

- Low utility salaries make it difficult to recruit and maintain qualified employees. A review of policies and practices is needed to improve financial incentives and decrease or eliminate restrictions on salary structures.
- Limited authority and autonomy of some local entities, notably public economic authorities, prevents them from setting employee wages, providing incentives, or managing their workforce efficiently.
- Salary and status differences between the water and wastewater authorities within a single jurisdiction often create tension between the two employee groups, and generally unfavorably affect the wastewater authority. Consideration should be given to having only one supervisory head for both water and wastewater authorities in each jurisdiction.

- Both local management and central agencies give a low priority and limited resources to training utility employees. Not enough technical, technological, and managerial training is provided for water and wastewater personnel. Low priority is given to setting and monitoring operations and maintenance performance standards. Personnel training and monitoring of performance are needed if performance levels are expected to rise.
- There is no enforcement or sanctions for non-payment of water bills. This is a serious problem when the consumer is a large governmental agency or private sector firm. One way to begin addressing this issue is to computerize record keeping systems, including billing and collections operations to track non-payment.
- Technicians and other personnel do not have a good relationship with citizens and consumers – they treat citizens only as “bill payers” and not customers to be satisfied.
- Citizens are not educated about water conservation and costs and, therefore, do not use efficient water saving techniques.
- Different structures of utility organizations at the local level, including private companies, PEAs, Cairo and Alexandria authorities, governorate housing departments, Suez Canal Authority, create barriers to cooperation among local entities. This results in lack of opportunities for sharing information, divisive criticism, unfavorable comparisons, and lack of interest in the success of others. High level coordination is needed between governors and utility chairmen to ensure better coordination. Links are also needed between water and wastewater authorities and town planning departments in order to improve cooperation at the local level.
- There are limited and inadequate forums for utility personnel to share information, experiences, or develop solutions to problems across the sector. Meetings and exchange of information between utilities on common management and operations issues, experiences, and approaches to problems should occur on a regular basis. Meetings of this type can help improve performance.

Unresolved Issues Requiring More Discussion

- How to improve employee compensation policies to attract and keep skilled employees.
- How to improve employee performance.
- Types of training that will give employees the knowledge and skills they need to do their jobs better. How, and by whom, necessary training should be developed, delivered and paid for.

- Types of forums, structures and procedures that will encourage enhanced coordination between governors and utility chairmen.
- Types of forums, structures and procedures that will help utilities share operations and maintenance information and experiences, solve common problems, and improve performance.
- Approaches and strategies needed to develop and implement public education programs on water and wastewater issues.

Stakeholder Interest for Resolving These Issues

- To satisfy citizens' needs for water and wastewater services.
- To meet demands caused by increasing urbanization and population growth, as well as economic and technological progress.
- To develop flexible thinking about solutions to operations and management problems among local utility managers and employees.
- To match the levels of authority and resources given to utility managers with the responsibilities and levels of performance expected from them.
- To create viable pay packages and incentive systems to enable utilities to recruit and maintain qualified personnel.
- To provide adequate training for employees so that utility performance can be enhanced.
- To develop and follow operations and maintenance standards.
- To create effective forums to discuss common local problems with utility personnel from across the sector.

Technical Problems

Stakeholders generally agreed on the technical problems facing the sector and the need to address these problems as rapidly and efficiently as possible. The issues in this category fall into three sub-categories.

- Water quality and quantity
- Urban expansion
- Internal utility management problems

Disagreements were minimal, and primarily focused on which issues to address first, which localities would receive the resources to do the job, and what entity would be responsible for resolving the problems.

Points of Agreement

Water Quality and Quantity

- Substantial industrial waste is discharged into water courses that are providing potable water.
- High leakage rates occur in water and wastewater networks, and a lack of conservation and monitoring has resulted in large amounts of wasted water.
- Water and wastewater plants have seriously deteriorated over time, and networks and facilities are poorly maintained.
- Water metering is insufficient, and meters are of poor quality.
- New approaches for irrigation and fertilizer use are needed to reduce pollution and contamination of water sources.

Population and Urban Expansion

- Residents from informal residential settlements and new neighborhoods are increasingly demanding water and wastewater services.
- Number of illegal hook-ups have increased significantly.
- Demands increasingly come from areas further from the water source which raises the cost of providing services.
- Old networks are unable to handle the power of new technology in water stations.
- Reasonably priced land is not available to site new water and wastewater facilities.

Utility Management

- Local entities have an inadequate cost accounting system, or none at all.
- Internal resistance to change exists among water and wastewater personnel at the local level.
- Local personnel lack the technical know-how to meet current service demands. This problem is aggravated by a lack of appropriate technical, technological, and managerial training.

Unresolved Issues Requiring Further Discussion

- Clarification of possible causes of each technical issue or problem.
- Possible options that would resolve each issue or respond to each cause identified.
- How the government could more effectively allocate its limited financial resources in a fair manner across the country to address these widespread technical problems.
- Ways revenues can be increased to address these critical problems.

Stakeholder Interest for Resolving These Issues

- To develop effective strategies and implementation plans to address water loss and enhance resource conservation.
- To increase the capacity to measure water consumption accurately.
- To expand existing financial resources to pay for solutions to technical problems.
- To provide effective training programs aimed at improving employee performance.

CHAPTER 5

STAKEHOLDER INVOLVEMENT IN THE POLICY REFORM PROCESS

Use of a Collaborative Planning Approach

A collaborative planning approach helps lead to a mutually agreed-upon solution to a problem. The solution addresses the concerns and interests of all involved parties or stakeholders to the greatest extent possible. This process usually makes implementation a far easier task since the parties have already expressed their agreement with the decision and their willingness to make it work.

During the stakeholder interviews, participants were asked how decisions about new sectoral policy reforms should be made and whether a collaborative planning approach that involved multiple stakeholders would be feasible and desirable.

Many stakeholders noted that traditional Egyptian decision-making approaches were fairly top-down in orientation. Generally, key decision-makers informally consult powerful stakeholders who are concerned about or have interests in a decision. Stakeholders who were interviewed explained that it was not common to foster a dialogue between multiple parties from different levels of government, where free and open discussions and problem-solving were encouraged, and where participants could deliberate and come to agreement. Participants also noted that the level of transparency in governmental decision-making being proposed would be unusual.

However, the vast majority of stakeholders interviewed believed that a collaborative planning approach was desirable, should be tried, and would perhaps be the only way to bring together all the stakeholders and views in the sector and arrive at a comprehensive policy reform package.

Stakeholders' Proposals to Support a Collaborative Planning Approach

The following recommendations to support collaborative planning were made by numerous interviewees:

- FORWARD should present the results of the situational analysis to the parties who were interviewed. This could be done in written form or in small group meetings with groups of interviewees.
- A steering committee should be formed to develop overall sector reform recommendations for the Cabinet. The MHPU would be an appropriate entity to convene such a steering committee. (This was subsequently done by the MPHU.)

- Governors should be directly involved in deliberations about any sector policy reform initiative. Their input and cooperation will be critical for effective oversight and implementation of agreed upon policies.
- Stakeholders from central, regional and local levels of government should be included in the steering committee and other policy reform dialogue processes. Representative mixes of participants should be convened for all dialogues or workgroups so that all principle parties are involved in developing solutions that will meet their interests, and which they will later support and implement.
- It would be desirable to collaboratively plan the agendas for stakeholder meetings and workgroups and to have the sessions professionally facilitated. The facilitators would work with the chairman of the steering committee and a small group of stakeholders to plan the meetings and develop appropriate agendas and to assist the parties to reach agreement. A significant number of stakeholders also agreed that a joint Egyptian/U.S. facilitation team would be acceptable.
- Parties in the reform process will need to be educated about collaborative problem-solving and decision-making and how to participate effectively in a collaborative planning process, to make the best use of the approach and to make acceptable and timely decisions. Stakeholders will need to learn how to dialogue, develop integrative solutions that satisfy multiple interests, and reach agreements, rather than just making statements and providing input. One way to prepare stakeholders for constructive engagement and collaborative problem-solving and decision-making would be to conduct brief process training sessions during the workgroup sessions. FORWARD facilitators could introduce procedures and skills that participants can then directly apply and use in their discussions.
- Stakeholders will benefit from special educational sessions that provide technical details about sectoral issues prior to making decisions about them. There was a concern that some stakeholders may need additional knowledge about the topics being discussed. Interviewees suggested that representatives be selected from various stakeholder groups who have both a strong interest in the sector and have had significant experience in sector issues. They also suggested that special educational sessions about specific issues be conducted, possibly by local experts, LIR or FORWARD representatives, or others, prior to deliberating on or deciding a question. Special educational sessions held prior to deliberations can save significant time later.
- It may be important to hold special sessions with specific stakeholders in order to address targeted issues or problems of concern to their group, or to coordinate some of their views prior to meeting with a larger, mixed group of stakeholders. For example there may be a need for PEA representatives to hold small group meetings to share information about how they plan to address and resolve problems that are of particular concern to local utilities and to formulate proposals for the larger group.

- Problem-solving meetings could be held between individual utilities, or between groups of utilities with common reporting, management, or financial structures. The agenda for these meetings could focus on sharing information about successful programs, plans for improvements, or other concerns that utility managers may find useful in improving their operations and maintenance efforts and that may also be useful in the reform process.
- Any proposed recommendations developed by stakeholder groups should be discussed and vetted with the Minister of Cabinet Affairs to make sure that they are consistent with the Cabinet decisions.
- Procedures need to be developed that enable stakeholders to carefully consider and discuss the social and political implications of any policy reform, and to develop strategies and approaches to communicate recommendations or decisions to the public in ways that build involvement and acceptance. A measure to achieve this end might be to develop a nation-wide, or Governorate-wide, public education and awareness building campaign to educate consumers about problems related to water loss, water conservation, and/or changes in rate structures.
- Once new policies have been established, an oversight body should be created that will coordinate implementation.
- Once new policies are established, regularly scheduled meetings, perhaps monthly, should be held between concerned parties working on the implementation of specific components of the plan. For example, NOPWASD may find it helpful to meet regularly with appropriate officials in the Ministries of Planning or Finance, or the Cairo and Alexandria authorities, or the PEAs .

CHAPTER 6

RECOMMENDATIONS

The following proposed activities to be carried out by FORWARD will support the GOE's efforts to introduce a collaborative problem-solving approach and facilitate a decision-making process that will lead water and wastewater sector policy reform in Egypt.

Steering Committee

Work closely with the MPHU steering committee that has already been formed to support their efforts to design a policy reform agenda.

Working Groups

With the approval of the steering committee and in coordination with LIR, establish three or four working groups that would focus on specific issues related to policy reform. The output of the working groups would serve as inputs into the policy reform proposals being prepared by the steering committee for submission to the Cabinet. The proposed working groups could include the legal framework, institutional restructuring, sector financial management, and donor coordination.

Introduce a collaborative problem-solving and decision-making approach into the process. This approach will include supporting the proposed working groups to:

- Develop by-laws for working together;
- Define leadership roles and responsibilities;
- Define roles and responsibilities of members;
- Agree on how decisions will be made;
- Focus and clarify their vision and mandate;
- Agree on and clearly define policy issues and technical areas to be discussed;
- Identify and facilitate presentation of technical input that is required by the groups to support their dialogue and decision-making process;
- Brainstorm and define alternatives;

- Formulate specific policy reforms and develop appropriate justifications for the reforms;
- Develop specific workplans and timeframes for actions to support the reforms; and
- Develop skills to facilitate their own meetings.

Training and Educational Efforts

Carry out executive briefings and training in facilitation and collaborative problem-solving for members of the steering committee, working groups, and others.

Work closely with LIR on the identification, design and implementation of various technical training sessions for the steering committee and working groups.

National and Local Sector Workshops

Organize and facilitate national and local level sector workshops to discuss and agree on how to implement the sector strategy, following Cabinet approval of the reform process.

Utility Staff Meetings

Convene and facilitate meetings at the governorate level with utility staff to discuss local issues and incorporate those into institutional reform strategies.

Technical Support to the GOE

Provide technical support to the GOE beyond the LIR mandate in areas to be identified, such as tariff reforms and water resources management.

APPENDIX

APPENDIX A STAKEHOLDERS INTERVIEWED

Central Ministries and Agencies

Ministry of Local Administration, Prime Minister's Office

Dr. Mohamed Sheta, General Secretary

Ministry of Housing, Public Utilities and New Communities

Magd El-Din Ibrahim, First Undersecretary

Hussein El Gebaly, First Undersecretary for the Minister's Technical Office

Eng. Sawsan El-Kasabi, Former First Undersecretary

National Organization for Potable Water and Sanitary Drainage

Eng. Mahmoud El Sarangawy, Chairman

Osama Abdel Rahman, Director

Ministry of Planning

Gamal Mohamed Ahmed, First Undersecretary and Manager of the Technical Office of the Minister

Nasr Tantawy, Counselor to the Minister and Counselor to the Head, Administrative Office, National Investment Bank

Housing and Development Bank

Eng. Talaat Abu Seadah, Chairman, Board of Directors

Ministry of State for Environment Affairs, Environmental Affairs Agency

Dr. Mohamed El Zurqaa, Head, Environmental Quality Sector

Mohamed Abdel Rahman Fawzi, Head, Environmental Management Sector

Central Agency for Organization and Administration

Ms. Samira Mustafa

Ms. Nagwa Adbel Moneim Sherif

Mr. Atia Aly Sherif

Greater Cairo and Alexandria Utilities

Greater Cairo General Water Authority (GOG)

Eng. Adel El Toweiry, Chairman

Greater Cairo General Authority for Sanitary Drainage (GOSD)

Eng. Sayed Abou El Elas, Project Manager, Organization Support
Farouk El Sheikh, Senior Strategy Planner, Organization Support
Abdel Rahman Farid, Organization Expert, Organization Support
Sayed Abou El Ela, Project Manager, Institutional Support Contract
Collie Martin, CH2M Hill, ISC Project Manager
Richard North, CH2M Hill

Alexandria Wastewater Authority

Nabil Shehata, Director, Technical Office for the Chairman

Alexandria Water General Authority (AWGA)

Hassan El Shafie, Chairman

Other Utilities

Beni Suef Public Economic Authority

Eng. Gamal Bishara, Chairman, Economic General Authority for Water and Sanitation

Fayoum Public Economic Authority

Eng. Assad Salama Attia, Chairman, Economic General Authority for Water and Sanitation

Eng. Hassaan Ali Gawad, Sanitation Section

Minia Public Economic Authority

Ahmed Samir El Beblawi, Chairman, Board of Directors, Potable Water and Sanitary Drainage Organization

El Sharqiya Public Economic Authority

Chairman, Board of Directors

Housing Department, Munefia Governorate

Eng. Mohamed Abu-Omar, General Manager

Suez Canal Authority

Eng. Nabil Lotfy, Manager of Public Works

Governors

Mr. Abdel Aziz Salama, Governor, Ismailia Governorate
Counselor Adly Hussein, Governor, Munefia Governorate
Major General Mustafa Abdel Qader, Governor, El Minya Governorate
Governor, Aswan Governorate
Governor, Luxor Governorate

Other Governorate Offices

Minia Governorate

Dr. Nabil Kamel, Director of Environmental Health Department, Health and Population Directorate, Ministry of Health

Aswan Governorate

Director, Information and Decision Support Office

Luxor Governorate

Director, Information and Decision Support Center

People's Assembly

Committee on Local Government and Popular Organization

Mr. Abdel Fattah El Dali, Chairman

Committee on Planning and Budget

Dr. Tolbah Uweidah, Chairman

Cities and Popular Councils

Cairo Governorate

Major Gen. (Ret.) Ahmed Ismail Fakhr, Chairman, Local People's Council
Eng. Ahmed Tawfiq, Chairman, Utilities Committee, Local People's Council

Shebeen El Koam City, Munefia Governorate

Eng. Abdel Rahman Butt, Chief